

REMARKS

Second Substitute Sequence Listing

Enclosed herewith in full compliance to 37 C.F.R. §§1.821-1.825 is a second Substitute Sequence Listing to be inserted into the specification as indicated above. The second Substitute Sequence Listing in no way introduces new matter into the specification. Also submitted herewith in full compliance to 37 C.F.R. §§1.821-1.825 is a disk copy of the second Substitute Sequence Listing. The disk copy of the second substitute Sequence Listing, file "2002-05-23 1781-0178P.ST25.txt", is identical to the paper copy, except that it lacks formatting.

Residue 17 of SEQ ID NO: 10

The second substitute Sequence Listing enclosed herewith correctly lists SEQ ID NO: 10 as having a Glutamine at residue 17. The substitute Sequence Listing filed January 22, 2001 inadvertently listed residue 17 of SEQ ID NO: 10 as having a Glycine due to a typographical error. The sequence of SEQ ID NO: 10 enclosed herewith is consistent with the sequence disclosed in the Specification as originally filed and is therefore not new matter. Applicants respectfully request that the Examiner remove their characterization of SEQ ID NO: 10 as new matter.

SEQ ID NO: 11

The Specification and Claims have been amended to clarify that it is nucleotides 18 through 80 of SEQ ID NO: 11 that encode for SEQ ID NO: 10. The second substitute Sequence Listing similarly describes SEQ ID NO: 11. These amendments in no way introduce new matter into the Specification. Support for these amendments can be found in Figures 5B, 5D, and 8B.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Please replace the paragraph beginning on page 24, line 1, with the following rewritten paragraph:

-- (amended) The DNA encoding the SS of the invention can of course vary with respect to degeneracy of the genetic code. A preferred nucleotide sequence encoding the SS of the invention is **nucleotides 18 through 80 of SEQ ID NO: 11**[att cac atc cac cag cc atg agg gtg ctt gta cta gct ctt gct gtg gct ctc gca gtg ggg gac cag tcc aac ttg ggg (SEQ ID NO: 11)]. Also, in embodiments of the invention wherein DNA encoding a SS of the invention is joined to DNA encoding a desired protein to be expressed, the joining should be done so that the reading frame of the SS and of the desired protein are the same. The joining can be performed so that the 3' end of the DNA encoding the SS is joined directly to the 5' end of the DNA encoding the desired protein. Alternatively, the 3' end of the DNA encoding the SS can be joined to a "linker" DNA that encodes additional amino acids, which linker DNA is then joined also to the 5' end of the DNA encoding the desired protein. --

In the Claims:

Please amend the claims as follows:

2. (Twice Amended) The isolated nucleic acid of claim 1, wherein the nucleotide sequence encoding the secretory signal sequence is **nucleotides 18 through 80 of** SEQ ID NO:11.

8. (Twice Amended) The isolated nucleic acid of claim 7, wherein the nucleotide sequence encoding the secretory signal sequence is nucleotides 18 through 80 of SEQ ID NO:11.

13. (Twice Amended) The isolated nucleic acid of claim 11, wherein the nucleotide sequence encoding the secretory signal sequence is nucleotides 18 through 80 of SEQ ID NO:11.